

AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions, and listings, of claims in the application:

- 1 1. (Currently Amended) A multi-staged services policer comprising:
  - 2 one or more processors;
  - 3 a downstream services policer; and
  - 4 an upstream services policer adapted to:
    - 5 receive a traffic unit;
    - 6 analyze said traffic unit;
    - 7 based on said analysis, transmit said traffic unit to said downstream services
    - 8 policer; and
    - 9 receive feedback from said downstream services policer.
- 1 2. (Original) The multi-staged services policer of claim 1 wherein said feedback from said
- 2 downstream services policer is an indication of available bandwidth.
- 1 3. (Cancelled)
- 1 4. (Original) The multi-staged services policer of claim 1 wherein at least one of said
- 2 services policers polices at an application layer granularity.
- 1 5. (Original) The multi-staged services policer of claim 1 wherein at least one of said
- 2 services policers polices at a data link layer granularity.
- 1 6. (Cancelled)
- 1 7. (Original) The multi-staged services policer of claim 1 wherein said traffic unit is a
- 2 Frame Relay frame.
- 1 8. (Original) The multi-staged services policer of claim 1 wherein said traffic unit is a
- 2 Internet protocol packet.

1 9. (Currently Amended) The multi-staged services policer of claim 1 where said upstream  
2 services policer is a first upstream services policer and said multi-staged services policer further  
3 comprises a second upstream services policer ~~adapted~~ to transmit traffic units received at said  
4 second upstream services policer to said downstream services policer based on an analysis  
5 specific to said second upstream services policer and wherein said downstream services policer  
6 affords a higher priority to traffic units received from said second upstream services policer than  
7 to traffic units received from said first upstream services policer.

1 10. (Previously Presented) A method of handling traffic units comprising:  
2 receiving, by an upstream services policer, a first traffic unit;  
3 analyzing, by the upstream services policer, said first traffic unit according to a first  
4 policy;  
5 based on said analysis, transmitting, by the upstream services policer, said first traffic  
6 unit to a downstream services policer;  
7 processing, by the downstream services policer, the first traffic unit according to a second  
8 policy; and  
9 receiving, by the upstream services policer, feedback from said downstream services  
10 policer to cause the upstream services policer to modify analysis by the upstream services policer  
11 of further received traffic units.

1 11. (Currently Amended) The method of claim 10 ~~wherein said traffic unit is a first traffic~~  
2 ~~unit and said method further comprises~~comprising:  
3 receiving, by the upstream services policer, a second traffic unit;  
4 analyzing, by the upstream services policer, said second traffic unit differently from the  
5 analyzing of the first traffic unit in light of said feedback; and  
6 based on said analysis of said second traffic unit, transmitting said second traffic unit to  
7 said downstream services policer.

1 12. (Previously Presented) A computer readable storage medium containing computer-  
2 executable instructions which, when executed by a processor in an upstream services policer  
3 that is upstream of a downstream services policer, cause the processor to:  
4 receive a first traffic unit;  
5 analyze said first traffic unit;  
6 based on said analysis, transmit said first traffic unit to said downstream services policer;  
7 receive feedback from said downstream services policer;  
8 receive a second traffic unit;  
9 in response to the received feedback, analyze said second traffic unit differently from  
10 analysis of said first traffic unit; and  
11 based on said analysis of said second traffic unit, transmit said second traffic unit to said  
12 downstream services policer.

1 13. (Currently Amended) A multi-staged services policer comprising:  
2 one or more processors;  
3 a downstream services policer; and  
4 a first upstream services policer ~~adapted~~ to:  
5 receive a first traffic unit;  
6 analyze said first traffic unit according to a first policy for a first class of service;  
7 based on said analysis, transmit said first traffic unit to said downstream services  
8 policer; and  
9 a second upstream services policer ~~adapted~~ to:  
10 receive a second traffic unit;  
11 analyze said second traffic unit according to a second policy for a second class of  
12 service;  
13 based on said analysis of said second traffic unit, amend said second traffic unit  
14 resulting in an amended traffic unit including an amendment, where said amendment may be  
15 interpreted by said downstream services policer, wherein said amendment indicates said second  
16 traffic unit as being a traffic unit for the first class of service rather than the second class of  
17 service; and  
18 transmit said amended traffic unit to said downstream services policer.

1 14. (Currently Amended) A multi-staged services policer comprising:  
2 one or more processors;  
3 a first services policer to police traffic units according to a first policy for a first class of  
4 service;  
5 a second services policer to police traffic units according to a second policy for a second  
6 class of service; and  
7 a third services policer receiving output from each of said first services policer and said  
8 second services policer, wherein the third services policer affords a higher priority to traffic units  
9 received from the first services policer than to traffic units received from the second services  
10 policer.

1 15. (Currently Amended) The multi-staged services policer of claim 1, wherein the upstream  
2 services policer is ~~adapted~~ to use the feedback from the downstream services policer to cause the  
3 upstream services policer to modify analysis of further traffic units received by the upstream  
4 services policer.

1 16. (Currently Amended) The multi-staged services policer of claim 15, wherein receiving  
2 the traffic unit comprises receiving a first traffic unit, and wherein the upstream services policer  
3 is a first upstream services policer that analyzes the first traffic unit according to a first policy,  
4 the multi-staged services policer further comprising:

5 a second upstream services policer to receive second traffic units, analyze the second  
6 traffic units according to a second policy, and based on the analysis according to the second  
7 policy, transmit the second traffic units to the downstream services policer,

8 wherein the feedback received by the first upstream services policer from the downstream  
9 services policer is in response to receipt of the second traffic units from the second upstream  
10 services policer.

1 17. (Currently Amended) The multi-staged services policer of claim 1, wherein receiving the  
2 traffic unit comprises receiving a first traffic unit, and wherein the downstream services policer  
3 is a first downstream services policer, and the upstream services policer is a ~~second-first~~  
4 upstream services policer to analyze the first traffic unit according to a first policy, and wherein  
5 the multi-staged services policer further comprises:

6 a second upstream services policer to receive second traffic units, analyze the second  
7 traffic units according to a second policy, and based on the analysis of the second traffic units,  
8 transmit the second traffic units to the first downstream services policer;

9 a second downstream services policer; and

10 a third upstream services policer to receive third traffic units, analyze the third traffic  
11 units according to a third policy, and based on the analysis of the third traffic units, transmit the  
12 third traffic units to the second downstream services policer,

13 wherein the first, second, and third policies are for different types of traffic units.

1 18. (Previously Presented) The method of claim 10, wherein the upstream services policer is  
2 a first upstream services policer, the method further comprising:

3 receiving a second traffic unit by a second upstream services policer;

4 analyzing, by the second upstream services policer, said second traffic unit according to a  
5 third policy;

6 based on said analysis of said second traffic unit, transmitting, by the second upstream  
7 services policer, said second traffic unit to the downstream services policer,

8 wherein said downstream services policer affords a higher priority to traffic units  
9 received from said second upstream services policer than to traffic units received from said first  
10 upstream services policer.

1 19. (Currently Amended) The multi-staged services policer of claim 13, wherein the  
2 downstream services policer is ~~adapted~~ to send feedback information to the first upstream  
3 services policer in response to the amended traffic unit, wherein the first upstream services  
4 policer responds to the feedback information by modifying analysis of further traffic units  
5 received by the first upstream services policer.

1 20. (Previously Presented) The multi-staged services policer of claim 13, wherein the  
2 downstream services policer affords a higher priority to traffic units received from the second  
3 upstream services policer than to traffic units received from the first upstream services policer.

1 21. (Previously Presented) The multi-staged services policer of claim 14, wherein the third  
2 services policer sends feedback information to the second services policer in response to traffic  
3 units received from the first services policer, wherein the second services policer modifies  
4 analysis of further traffic units received by the second services policer in response to the  
5 feedback information.

1 22. (New) The multi-staged services policer of claim 1, wherein the downstream services  
2 policer includes a first of the processors, and the upstream services policer includes a second of  
3 the processors.

- 1 23. (New) The multi-staged services policer of claim 1, wherein the downstream and
- 2 upstream services policers are executable on the one or more processors.